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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:)	
Zarook M. Shareefdeen et al.)	Group Art Unit: 1744
)	
Serial No.: 10/687,761)	Examiner: unknown
)	
Filed: October 20, 2003)	Attorney Docket: 225335.00004
)	(formerly
For: BIOLOGICAL FILTER)	3251378.0004)
)	
)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

INFORMATION DISCLOSURE STATEMENT

This Information Disclosure Statement is being filed in the manner prescribed by 37 CFR 1.97(b) - (d) to satisfy the duty under 37 CFR 1.56 to disclose to the Patent Office information, known to individuals associated with the filing and prosecution of the subject application, which is material to the examination of the application.

In accordance with 37 CFR 1.97(g) and (h), this statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 CFR 1.56(b).

This information disclosure statement is being filed before the mailing date of a first official action on the merits and therefore applicant respectfully requests consideration under 37 CFR 1.97(b).

In compliance with 37 CFR 1.98(a)(1), a list of all patents, publications or other information submitted for consideration by the Office is hereby provided by way of the attached Form PTO-1449.

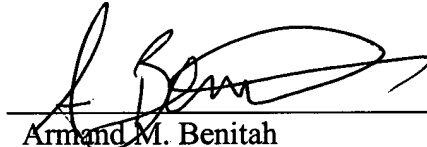
In compliance with 37 CFR 1.98(a)(2), also enclosed, where applicable, is a legible copy of:

- i) each U.S. patent application publication and United States and foreign patent;

- ii) each publication or that portion which caused it to be listed;
- iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion; and
- iv) all other information or that portion which caused it to be listed, excluding any copies of unpublished United States patent applications.

It is respectfully requested that the information be expressly considered by the Examiner and that the references be made of record and appear among the "References Cited" on any patent to issue therefrom.

Respectfully submitted,



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Date: October 27, 2004

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Enclosures

FORM PTO-1449

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**
(Use several sheets if necessary)

Docket Number (Optional)

225335.00004

Application Number

10/687,761

Applicant

Zarook M. Shareefdeen et al.

Filing Date

October 20, 2003

Group Art Unit

1744

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,206,206	Ap. 27, 1993	Buelna et al			
	5,232,676	Aug. 3, 1993	Wolff et al			
	5,534,154	Jul. 9, 1996	Gillham			
	5,747,331	May 5, 1998	Hartikainen et al			
	5,855,797	Jan. 5, 1999	Luong et al			
	5,869,323	Feb. 9, 1999	Horn			
	5,981,272	Nov. 9, 1999	Chang			
	6,019,810	Feb. 1, 2000	Phillips et al.			
	6,056,934	May 2, 2000	Carlsen et al			
	6,271,020	Aug. 7, 2001	Coleman			
	6,358,729	Mar. 19, 2002	Ferranti			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE dd/mm/yy	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
						YES	NO
	0 414 095 B2	Aug. 14, 1990	EP				
	0 497 214 B1	Jan 1, 1992	EP				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Aroca, G., Oyarzun, P. and Nunez, D., "Removal of Hydrogen Sulphide in a Biotrickling Filter", 2002 USC-TRG Conference on Biofiltration Proceedings, Newport Beach, CA, pp. 139-146, October 31 - November 1, 2002
	Cadenhead P. C. and K. L. Sublette, "Oxidation of Hydrogen Sulfide by Thiobacilli", <i>Biotechnology and Bioengineering</i> , Vol. 35, pp 1150-1154, 1990.
	Cho <i>et al.</i> , "Degradation Characteristics of Hydrogen Sulfide, Methanethiol, Dimethyl Sulfide, and Dimethyl Disulfide by <i>Thiobacillus thioeparus</i> DW44 Isolated from Peat Biofilter", <i>Journal of Fermentation and Bioengineering</i> ", Vol. 71, No. 6, 384-389, 1991.
EXAMINER:	DATE CONSIDERED:

FORM PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional) 225335.00004	Application Number 10/687,761
	Applicant Zarqok M. Shareefdeen et al.	
	Filing Date October 20, 2003	Group Art Unit 1744

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE dd/mm/yy	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	Cho <i>et al.</i> , "Enhanced Removability of Odorous Sulfur-Containing Gases by Mixed Cultures of Purified Bacteria from Peat Biofilters", <i>Journal of Fermentation and Bioengineering</i> , Vol. 73, No. 3, pp 219-224, 1992.
	Cioci, F., Lavecchia, R. and Ferranti, M. M. "High-Performance microbial removal of ethanol from contaminated air", <i>web www.corain.it</i>
	Devinny, J.S. Deshusses, M. A., Webster, T. S., "Biofiltration for Air Pollution Control", Lewis Publishers, NY, Chapter 6, pp 111-139, 1999.
	Ottengraf, S. P. P. and Van Den Oever, A. H. C., "Kinetics of Organic Compound Removal from Waste Gases with a Biological Filter" <i>Biotechnology and Bioengineering</i> , Vol XXV, pp 3089-3102, 1983
	Park, S-J, <i>et al</i> "Removability of Malodorous Gases from a Night Soil Treatment Plant by a Pilot-Scale Peat Biofilter Inoculated with Thiobacillus thioparus DW44", <i>Journal of Fermentation and Bioengineering</i> , Vol. 76, No. 1, 55-59, 1993.
	Pol, A. <i>et al.</i> "Isolation of dimethylsulfide-utilizing <i>Hyphomicrobium</i> species and its application in biofiltration of polluted air", <i>Biodegradation</i> , Vol. 5, 105-112, 1994.
	Smet, E. <i>et al.</i> , "Isobutyraldehyde as a competitor of the dimethyl sulphide degrading activity in biofilters" <i>Biodegradation</i> , Vol. 8, pp. 53-59, 1997.
	Sologar, V.C., Z. Lu and G. Allen, "Modeling the Biofiltration of Air Emissions Containing Reduced Sulphur Compounds (RSCs) and Volatile Organic Compounds (VOCs)", 2002 USC-TRG conference on Biofiltration, October 31 and November 1, 2002, Newport Beach, CA, pp 167-177, 2002.
	Treybal, R.E. Mass-Transfer Operations, McGraw Hill, London, Chapter 11, pp 565-575 (1981)
	Ying-Chien Chung <i>et al</i> , "Comparison of Autotrophic and Mixotrophic Biofilters for Hydrogen Sulfide Removal", <i>Journal of Environmental Engineering</i> , April 1998.
EXAMINER:	DATE CONSIDERED: